

Title (en)
ELECTRONIC DEVICE

Title (de)
ELEKTRONISCHE VORRICHTUNG

Title (fr)
DISPOSITIF ÉLECTRONIQUE

Publication
EP 4213384 A1 20230719 (EN)

Application
EP 21880477 A 20211012

Priority
• KR 2021014042 W 20211012
• KR 20200134002 A 20201016

Abstract (en)

An electronic apparatus includes a power supply configured to supply power to loads, the power supply including a converter including a switching device operating by a switching mode method, an inductor and an output capacitor, and configured to provide an output voltage converted in level from an input voltage, a protection switching device provided between the inductor and the output capacitor and turned on or off to selectively connect the inductor and the output capacitor, and a protection circuit configured to provide a control voltage to turn on the protection switching device based on voltage applied between the inductor and the protection switching device and being lower than or equal to a threshold level corresponding overvoltage, and turn off the protection switching device based on the voltage applied between the inductor and the protection switching device and being higher than the threshold level, and the control voltage being varied depending on variation in the input voltage or the output voltage and having a level corresponding to a threshold voltage for turning on or off the protection switching device.

IPC 8 full level

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CPC (source: EP KR US)

H02H 7/1213 (2013.01 - US); **H02M 1/0006** (2021.05 - KR); **H02M 1/32** (2013.01 - EP KR US); **H02M 3/155** (2013.01 - KR);
H02M 3/158 (2013.01 - EP US); **H03K 17/08104** (2013.01 - KR); **H03K 17/0822** (2013.01 - EP); **H03K 17/6871** (2013.01 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 21880477 A 20211012; KR 20200134002 A 20201016; KR 2021014042 W 20211012; US 202318134856 A 20230414